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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,098	08/04/2000	Seigo Shiraishi	2000-1072	2484
7590 10/04/2004 Wenderoth Lind & Ponack LLP 2033 K Street NW Suite 800 Washington, DC 20006			EXAMINER RAO, SHRINIVAS H	
			ART UNIT 2814	PAPER NUMBER

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/633,098

Applicant(s)

SHIRAISHI ET AL.

Examiner

Steven H. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 23-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of paper submitted under 37 CFR 1.114 and 35 U.S.C. 119(a)-(d), claiming priority from U.S. Serial No. 09/633,098 filed on August 04, 2000 which itself claims priority from Japanese Patent Publication No. P10-140952 filed on May 22, 1998 which papers have been placed of record in the file.

Continued Prosecution Application

The request filed on September 01, 2004 for a Request for Continued Examination Application (RCE) under 37 CFR 1.114(d) based on parent Application No. 09/633,098 is acceptable and RCE has been established. An action on the RCE follows.

Preliminary Amendment Status

Acknowledgment is made of entry of preliminary amendment filed August 19, 2004(entered on September 01, 2004) .

Therefore claims 23-32 as recited in the amendment are currently pending in the Application.

Claims 1-22 have been cancelled.

Information Disclosure Statement

No further IDS, after the one filed July 17, 2002 have been filed to date in the Instant Application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23 to 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (U. S. Patent No. 5,972,052 herein after Kobayashi) and Maeda et al. (U.S. Patent No. 5,959,831 herein after Maeda)

With respect to independent claim 23, Kobayashi describes a method of producing an electrolytic capacitor comprising an anode layer formed of a valve metal foil having through holes formed there through and a coarsened surface, a dielectric layer of an oxide film formed by anodizing a part of the surface of the valve metal foil, and a cathode conductive polymer layer formed on the dielectric layer , wherein the method comprises steps of : forming the through holes through the valve metal foil (Kobayashi col. 4 lines 60-65) including the steps of forming one electrolyzing electrode on one side surface of the valve metal foil (Kobayashi fig. 4 step s1, col. 8 lines 61- col. 9 lines 6), immersing the valve metal foil in a conductive monomer solution where another electrode is disposed in the solution apart from the opposite side of the valve

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metal foil with respect to one electrolyzing electrode (Kobayashi fig. 4 step S2, col. 9 line 6-11), polymerizing the monomer by electrolyzing the solution between the electrolyzing electrode and said another electrode (Kobayashi col. 9 lines 32-35) , to form a electrolytically- formed conductive polymer layer (Kobayashi col. 9 lines 33-46, step 6,7), to form an electrolytically-formed conductive polymer layer while growing through the through holes in the thickness direction of, and covering the opposite side of, the valve metal foil, which layer, as the cathode layer, is attached to the surface of the oxide film on the vale metal foil.

Kobayashi does not specifically mention its electrolytically –formed conductive polymer layer as growing through the through holes in the thickness direction .

However, Maeda a patent from the same filed of endeavor, describes in Figures 12 to 14 and col. 1 lines 30 to col. 2 line 6 and figure 2 etc. col. 4 lines 5 to 39 electrolytically –formed conductive polymer layer as growing (going) through the through holes in the thickness direction to avoid the deposited electrode to project beyond the dielectric layer and thereby coming in to direct contact with the anode electrode and shorting between the cathode and the anode.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Maeda's electrolytically –formed conductive polymer layer as growing through the through holes (Maeda) in Kobayashi's method steps to avoid the deposited electrode to project beyond the dielectric layer and thereby coming in to direct contact with the anode electrode and shorting between the cathode and the anode. (Maeda col. 2 lines 3-5).

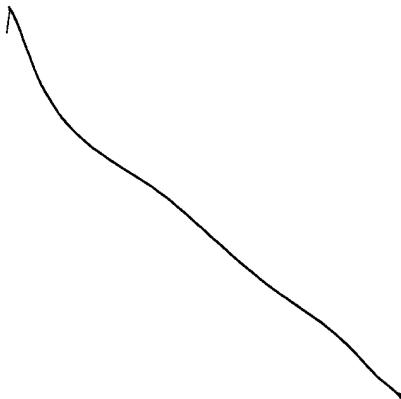
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The other limitations of claim 23 are , " and covering the opposite side of, the valve metal foil, which layer, as the cathode layer, is attached to the surface of the oxide film on the valve metal foil." (Kobayashi col.9 lines 32 to 46).

With respect to claim 24, Kobayashi describes the method of claim 23 wherein the electrolyzing electrode is a cathode-side conductive polymer layer (see above), the electrolytically-formed conductive polymer layer and the cathode -side conductive polymer layer being used as a cathode layer of the capacitor (see above Maeda col.4 lines 5-39).

With respect to claim 25, Kobayashi describes the method of claim 23 wherein the electrolyzing electrode comprise a cathode-side conductive polymer layer and a metal foil provided on the cathode-side conductive polymer layer, thereafter, the electrolytically-formed conductive polymer layer and the cathode-side conductive polymer layer being used as a cathode layer of the capacitor (Maeda col.4 lines 5-39) , and the metal foil being used as a cathode electric collector(Kobayashi col. 5 lines 59-60).

With respect to claim 26, Kobayashi describes the method of claim 23 wherein a conductive layer is partially formed on the surface of the dielectric layer prior to the polymerizing step.(Kobayashi fig.7 steps s1 and s2).



over

With respect to claims 27, 28 and 29 Kobayashi describes the method of producing a laminated electrolytic capacitor further includes : laminating a plurality of the electrolytic capacitors according to claim 23,24,25 to obtain a laminate (Kobayashi col. 9 lines 45-47), connecting a common anodic wiring electrode to the metal surface portion of each valve metal foil of the laminate (Kobayashi col. 9 line 41-42) , connecting a common cathodic wiring electrode to each electrolytically- formed conductive polymer layer of the laminate (Kobayashi col. 9 lines 42-43) and connecting a common cathodic wiring electrode to each electrolytically-formed conductive polymer layer of the laminate (Kobayshi col. 9 lines 41-45).

With respect to claim 30, Kobayashi describes , the method of producing an electrolytic capacitor according to one of claim 27, wherein the method further comprises a step of anodizing a part of the anode valve metal foil again, (Sakata col. 5 lines 45-60) after the metal surface portion is connected to the anodic wiring electrode and before one of the electrolytically-formed conductive polymer layer, the cathode-side conductive polymer layer and the cathode electrode collector is electrically connected to the cathodic wiring electrode (Kobayashi col. 9 lines 42-43).

It is noted for the record that, order of sequence of performing method steps is prima facie obvious in the absence of new or unexpected results. Therefore the applicants' merely changing the order in which the steps are performed is prima facie obvious. Ex parte Rubin, 126 USPQ 440 (BAPI 1959), In re Burhaus, 154 F.2d. 690, 69 USPQ330 (CCPA 1946) , In re Gibson, 39 F.2d. 975, 5 USPQ 230 CCPA 1930).

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With respect to claim 31, Kobayashi describes the method of producing a wound electrolytic capacitor according to one of claim 23, wherein the method further comprises a step of winding an electrolytic capacitor in the shape of a coil. (Kobayashi col. 9 lines 41-42).

With respect to claim 32 Kobayashi describes the method of claim 31 further comprises a step of anodizing a part of the anode valve metal foil again, after the electrolytic capacitor is wound in the shape of coil. (Kobayashi col. 9 lines 41-42, as to when the step is performed in the process see above It is noted for the record that, order of sequence of performing method steps is prima facie obvious in the absence of new or unexpected results. Therefore the applicants' merely changing the order in which the steps are performed is prima facie obvious. Ex parte Rubin, 126 USPQ 440 (BAPI 1959), In re Burhaus, 154 F.2d. 690, 69 USPQ330 (CCPA 1946) , In re Gibson, 39 F.2d. 975, 5 USPQ 230 (CCPA 1930)).

Response to Arguments

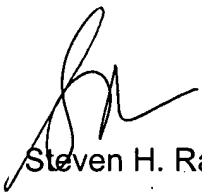
Applicants' arguments to extent applicable to herein newly presented claims 23-32 have been considered but not persuasive for reasons set forth in the rejections above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. Rao whose telephone number is (703) 3065945. The examiner can normally be reached on 8.00 to 5.00.

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The fax phone numbers for the organization where this application or proceeding is assigned are (703) 7463926 for regular communications and (703) 872-9319 for After Final communications.

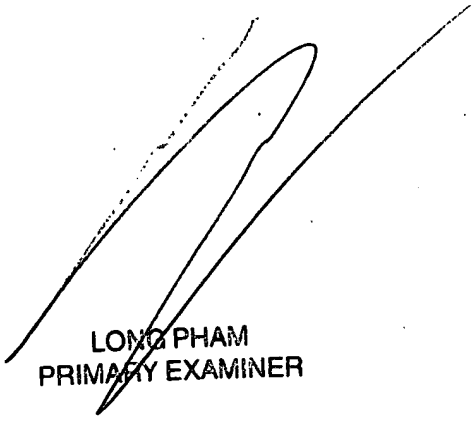
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 3067722.



Steven H. Rao

Patent Examiner

September 25, 2004.



LONG PHAM
PRIMARY EXAMINER